

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An organic electroluminescent element containing an unsubstituted  $\pi$  conjugated organic polymer compound, comprising a functional layer which is formed by causing gas molecules of at least one type of compound selected from the group consisting of ~~dyes~~ fluorescent dyes and charge transport materials to contact and penetrate the unsubstituted  $\pi$  conjugated organic polymer compound by heating the unsubstituted  $\pi$  conjugated organic polymer compound and the at least one type of compound selected from the group consisting of fluorescent dyes ~~dyes~~ and charge transport materials in a thermostatic chamber, the thermostatic chamber comprising:

a sealed container saturated with a vapor and maintained at an elevated temperature for a period of time,

wherein the elevated temperature is below the melting point of the unsubstituted  $\pi$  conjugated organic polymer compound,

the period of time being long enough for the compound selected from the group consisting of the fluorescent dyes and charge transport materials to diffuse through said organic polymer, and

the unsubstituted  $\pi$  conjugated organic polymer is selected from the group consisting of poly(p-phenylenevinylene), polythiophenevinylene, poly(p-phenylene) and poly(p-phenylacetylene).

2. (Currently Amended) An organic electroluminescent element containing an unsubstituted  $\pi$  conjugated organic polymer compound, comprising a light-emitting layer which is formed by causing gas molecules of at least one type of compound selected from the

group consisting of ~~dyes~~ fluorescent dyes and charge transport materials to contact and penetrate the unsubstituted  $\pi$  conjugated organic polymer compound by heating the unsubstituted  $\pi$  conjugated organic polymer compound and the at least one type of compound selected from the group consisting of fluorescent dyes ~~dyes~~ and charge transport materials in a thermostatic chamber, the thermostatic chamber comprising:

a sealed container saturated with a vapor and maintained at an elevated temperature for a period of time,

wherein the elevated temperature is below the melting point of the unsubstituted  $\pi$  conjugated organic polymer compound,

the period of time being long enough for the compound selected from the group consisting of the fluorescent dyes and charge transport materials to diffuse through said organic polymer, and

the unsubstituted  $\pi$  conjugated organic polymer is selected from the group consisting of poly(p-phenylenevinylene), polythiophenevinylene, poly(p-phenylene) and poly(p-phenylacetylene).

3. (Currently Amended) An organic electroluminescent element containing an unsubstituted  $\pi$  conjugated organic polymer compound, comprising a charge transport layer which is formed by causing gas molecules of at least one type of compound selected from the group consisting of ~~dyes~~ fluorescent dyes and charge transport materials to contact and penetrate the unsubstituted  $\pi$  conjugated organic polymer compound by heating the unsubstituted  $\pi$  conjugated organic polymer compound and the at least one type of compound selected from the group consisting of fluorescent dyes ~~dyes~~ and charge transport materials in a thermostatic chamber, the thermostatic chamber comprising:

a sealed container saturated with a vapor and maintained at an elevated

temperature for a period of time,

wherein the elevated temperature is below the melting point of the  
unsubstituted  $\pi$  conjugated organic polymer compound,

the period of time being long enough for the compound selected from the  
group consisting of the fluorescent dyes and charge transport materials to diffuse through said  
organic polymer, and

the unsubstituted  $\pi$  conjugated organic polymer is selected from the group  
consisting of poly(p-phenylenevinylene), polythiophenevinylene, poly(p-phenylene) and  
poly(p-phenylacetylene).

4. (Currently Amended) An organic electroluminescent element containing an unsubstituted  $\pi$  conjugated organic polymer compound, comprising a light-emitting layer and a charge transport layer which are formed by causing gas molecules of at least one type of compound selected from the group consisting of ~~dyes~~ fluorescent dyes and charge transport materials to contact and penetrate the unsubstituted  $\pi$  conjugated organic polymer compound by heating the unsubstituted  $\pi$  conjugated organic polymer compound and the at least one type of compound selected from the group consisting of fluorescent dyes~~dyes~~ and charge transport materials in a thermostatic chamber, the thermostatic chamber comprising:

a sealed container saturated with a vapor and maintained at an elevated  
temperature for a period of time,

wherein the elevated temperature is below the melting point of the  
unsubstituted  $\pi$  conjugated organic polymer compound,

the period of time being long enough for the compound selected from the  
group consisting of the fluorescent dyes and charge transport materials to diffuse through said  
organic polymer, and

the unsubstituted  $\pi$  conjugated organic polymer is selected from the group consisting of poly(p-phenylenevinylene), polythiophenevinylene, poly(p-phenylene) and poly(p-phenylacetylene).

5. (Withdrawn – Currently Amended) A method for manufacturing an organic electroluminescent element, comprising heating an unsubstituted  $\pi$  conjugated organic polymer compound, and causing gas molecules of at least one type of compound selected from the group consisting of ~~dyes~~ fluorescent dyes and charge transport materials to contact and penetrate the unsubstituted  $\pi$  conjugated organic polymer compound by heating the unsubstituted  $\pi$  conjugated organic polymer compound and the at least one type of compound selected from the group consisting of ~~dyes~~ fluorescent dyes and charge transport materials in a thermostatic chamber, the thermostatic chamber comprising:

a sealed container saturated with a vapor and maintained at an elevated temperature for a period of time, wherein the elevated temperature is below the melting point of the unsubstituted  $\pi$  conjugated organic polymer compound,

wherein the period of time being long enough for the compound selected from the group consisting of the fluorescent dyes and charge transport materials to diffuse through said organic polymer, and

the unsubstituted  $\pi$  conjugated organic polymer is at least one type selected from the group consisting of poly(p-phenylenevinylene), polythiophene, polythiophenevinylene, poly(p-phenylene) and poly(p-phenylacetylene).

6. (Previously Presented) The organic electroluminescent element according to claim 1, wherein the unsubstituted  $\pi$  conjugated organic polymer compound has a chemical structure represented by a general formula  $-(Ar)_n-$  and/or  $-(ArA)_n-$ , where Ar represents a benzene ring, a thiophene ring, a pyridine ring, a pyrrole ring or an oxadiazole ring and A

represents a double bond, a triple bond or an NH bond.

7-8. (Canceled)

9. (Currently Amended) The organic electroluminescent element according to ~~claim 8~~claim 1, wherein the fluorescent dye is at least one type of dye selected from the group consisting of a coumarin type dye, a quinacridone type dye, a dicyanomethylene type dye, a dicyanoazepine, a benzothiazole type dye, a perylene type dye, an acetonitrile-triphenylamine type dye, an Eu atom-containing complex type dye and an azabenzanthracene-pyran type dye.

10. (Previously Presented) The organic electroluminescent element according to claim 1, wherein the charge transport compound is at least one type of compound selected from the group consisting of a hole transport material which transports a positive (+) charge, an electron transport material which transports a negative (-) charge, and an electron transport compound having a light emission ability.

11. (Original) The organic electroluminescent element according to claim 10, wherein the hole transport material is at least one type of hole transport material selected from the group consisting of low molecular compounds having a carbazole ring, a thiophene ring, triphenylamine, triphenylmethane or distilbene structure, and compounds having the low molecular compounds bonded by a diazo or triazo group.

12. (Original) The organic electroluminescent element according to claim 10, wherein the electron transport material is at least one type of electron transport material selected from the group consisting of compounds having an oxadiazole ring, a triazole ring, a quinone ring, an imidazole ring, a flavone ring, a thiazole ring, a benzimidazole ring, a quinoline ring, a quinoxaline ring or a pyrazine ring, and compounds having a nitro group or a cyano group introduced into the former compounds.

13. (Original) The organic electroluminescent element according to claim 10, wherein the electron transport compound having a light emission ability is at least one type selected from the group consisting of aluminum, zinc, beryllium, europium and erbium complexes having a benzooxadiazole ring, a quinolyl ring, a benzoquinolyl ring, a benzothiazole ring or a hydroxyflavone ring in a ligand.

14. (Currently Amended) The organic electroluminescent element according to claim 1, wherein the ~~unsubstituted  $\pi$  conjugated organic polymer compound is at least one type selected from the group consisting of poly(p-phenylenevinylene), polythiophene, polythiophenevinylene, poly(p-phenylene) and poly(p-phenylacetylene), and the charge~~ transport compound is 2-(4-biphenyl)-5-(4-tert-butylphenyl)-1,3,4-oxadiazole.

15. (New) The organic electroluminescent element according to claim 1, wherein the elevated temperature is within a range of 120°C to 150°C.